

ABSTRACT OF THE DISCLOSURE

Peptides are provided which have improved duration of GnRH antagonistic properties. These antagonists may be used to regulate fertility and to treat steroid-dependent tumors and for other short-term and long-term treatment indications. These antagonists have ~~an aminoPhe or its equivalent in the 5-, the 6-, or the 5- and 6-position side chains containing a carbamoyl group or heterocyclic ring that includes a urea moiety.~~ Particularly effective decapeptides, which continue to exhibit very substantial suppression of LH secretion at 96 hours following injection, have the formulae: Ac-D-2Nal-D-4Cpa-D-3Pal-Ser-4Aph(hydroorotyl)-D-4Aph(acetyl)-Leu-Lys(isopropyl)-Pro-D-Ala-NH<sub>2</sub>, and Ac-D-2Nal-D-4Cpa-D-3Pal-Ser-4Aph(hydroorotyl)-D-4Amf(Q<sub>2</sub>)-Leu-Lys(isopropyl)-Pro-D-Ala-NH<sub>2</sub>, wherein Q<sub>2</sub> is Cbm or MeCbm.